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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/671,839	09/25/2003	Motoyuki Tanaka	03591/LH	9632		
1933	7590 03/01/20	4	EXAM	EXAMINER		
	HOLTZ, GOODM	TAMAI,	TAMAI, KARL I			
767 THIRD A			ART UNIT	PAPER NUMBER		
	NY 10017-2023	2834	2834			

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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ni.		Applicat	on No.	Applicant(s)				
Office Action Summary		10/671,8	39	TANAKA ET AL.				
		Examine	r	Art Unit				
		Tamai IE	Karl _	2834				
Period fo	The MAILING DATE of this commun or Reply	ication appears on th	e cover sheet with the	correspondence addres	s			
THE - External after - If NO - Failth Any	ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN nsions of time may be available under the provisions 'SIX (6) MONTHS from the mailing date of this comr e period for reply specified above is less than thirty (3 D period for reply is specified above, the maximum st ure to reply within the set or extended period for reply reply received by the Office later than three months ed patent term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no evenunication. sol) days, a reply within the statutory period will apply and very will, by statute, cause the ap	vent, however, may a reply be ti tutory minimum of thirty (30) da vill expire SIX (6) MONTHS fron plication to become ABANDONI	mely filed ys will be considered timely. In the mailing date of this communication (35 U.S.C. § 133).	nication.			
Status								
1)	Responsive to communication(s) file	ed on						
·		2b)⊠ This action is i	non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims	•						
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-8</u> is/are pending in the ap 4a) Of the above claim(s) is/a Claim(s) is/are allowed. Claim(s) <u>1-3 and 5-8</u> is/are rejected Claim(s) <u>4</u> is/are objected to. Claim(s) are subject to restrict	re withdrawn from co						
Applicat	ion Papers							
9)⊠	The specification is objected to by the	e Examiner.						
10)[The drawing(s) filed on is/are	: a) ☐ accepted or b) ☐ objected to by the	Examiner.				
	Applicant may not request that any obje	*	•	• •				
11)	Replacement drawing sheet(s) including The oath or declaration is objected to	•		-				
Priority :	under 35 U.S.C. § 119							
a)	Acknowledgment is made of a claim All b) Some * c) None of: 1. Certified copies of the priority 2. Certified copies of the priority 3. Copies of the certified copies application from the Internationsee the attached detailed Office actions	documents have be documents have be of the priority docum onal Bureau (PCT Ru	en received. en received in Applicat ents have been receiv le 17.2(a)).	tion No red in this National Stag	je			
Attachmer	nt(s) ce of References Cited (PTO-892)		4) 🔲 Interview Summar	y (PTO-413)				
2) Notice	ce of Draftsperson's Patent Drawing Review (F		Paper No(s)/Mail D		· ·			
	mation Disclosure Statement(s) (PTO-1449 or er No(s)/Mail Date <u>9/25/03</u> .	· PTO/SB/08)	6) Other:	гасент Аррисацон (РТО-152	,			

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Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lordo (US 4,453,097). Lordo teaches a DC motor having a square stator 20 with grooves A facing the ends of the magnets 27, where the grooves includes a surface 24 which is set back from the surface of the magnet and continues to the edge of the magnet 27. The motor includes frames 14 and 16 for supporting the rotor.
- 5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Reiss et al. (Reiss)(US 4,508,988). Riess teaches a DC motor having a laminated stator 2 with grooves 11/12 having a surface which is set back from the surface of the

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magnet and the side surfaces continues to the edge of the magnets 8,10. It is inherent that the motor includes frames 14 and 16 for supporting the rotor.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 8. Claims 3, 5, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiss et al. (Reiss)(US 4,508,988), in further view of Brosse (FR 2617345). Reiss teaches every aspect of the invention except an injection molded resin magnet on to the stator having at least 3 grooves in the stator core and mating with 3 projections on the permanent magnet. Brosse teaches three grooves 6 on the stator for mating with the

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projections on the magnet which is injection molded on to the stator. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the stator of Reiss with the resin magnet of Brossse to anchor the magnets on the stator core.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reiss et al. (Reiss)(US 4,508,988) and Brosse (FR 2617345), in further view of Boyd, Jr. et al. (Boyd)(US 5,668,429). Reiss and Brosse teach every aspect of the invention except the stator lamination being square with the projections/grooves being the in four corners. It is inherent that the grooves evenly spaced on the rear of magnet of Brosse will be on the four corners of the stator core, when combined with Riess. Boyd teaches the laminations are square to save material during stamping of the stator core and because the mounting holes for the end frames are located in the corners. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the stator of Reiss and Brosse with square laminations to not waste lamination material and to mount the endframes to support the rotor.

Allowable Subject Matter

10. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number at (571) 272 - 2036.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (571) 272 - 2034. The facsimile number for the Group is (703) 872 - 9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Karl I Tamai PRIMARY PATENT EXAMINER February 13, 2004